

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

690 Walnut Ave.St. 150

Vallejo, CA 94592-1133

(707) 649-5453

(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-005492**Date Inspected:** 24-Feb-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai China

CWI Name:	Yu Dong Ping		
Inspected CWI report:	Yes	No	N/A
Electrode to specification:	Yes	No	N/A
Qualified Welders:	Yes	No	N/A
Approved Drawings:	Yes	No	N/A

CWI Present:	Yes	No	
Rod Oven in Use:	Yes	No	N/A
Weld Procedures Followed:	Yes	No	N/A
Verified Joint Fit-up:	Yes	No	N/A
Approved WPS:	Yes	No	N/A
Delayed / Cancelled:	Yes	No	N/A

Bridge No: 34-0006**Component:** OBG cross beams and suspension brackets**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Steve Hall was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

OBG bay 19

This QA observed ZPMC qualified welding personnel identified as Mr. Han Zejiao (062808) and Mr. Fei Xiang (062751) perform FCAW welding on suspension bracket identified as SB002-014. ZPMC QC identified as Mr. Xu Tao was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2132-3.

This QA observed ZPMC qualified welding personnel identified as Mr. Hao Jinhu (062731) and Mr. Liu Houguang (062794) perform FCAW welding on suspension bracket identified as SB005-014 and SB006-024. ZPMC QC identified as Mr. Xu Tao was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2132-3.

This QA observed ZPMC qualified welding personnel identified as Mr. Xu Aihua (062816) perform SAW welding on weld joints identified as BP025-009-001 and BP028-001-001. ZPMC QC CWI identified as Mr. Yu Dong Ping was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2221-B-L2c-S-2.

This QA observed ZPMC qualified welding personnel identified as Mr. Wang Yulong (062817) perform SAW welding on weld joints identified as BP-027-001-001 and BP028-001-003. ZPMC QC CWI identified as Mr. Yu

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Dong Ping was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2221-B-L2c-S-2.

This QA observed ZPMC personnel performing various functions relative to the fabrication of the cross beams and suspension brackets including fit up and tack welding cross beam bottom panel splice joints, stiffeners and suspension brackets, grinding, back gouging and hole drilling.

This QA observed ZPMC personnel flame straightening cross beam bottom panel identified as BP026-002 distorted by the SAW welding process. The flame straightening process appeared to be in general compliance with ZPMC heat straightening procedure HSR1 (B)-5257 and the contractors WQCP section 11.

OBG outside deck panel repair

This QA observed ZPMC qualified welding personnel identified as Mr. Xu Guoyin (059443) perform FCAW repair welding on U-rib to deck panel Partial Joint Penetration (PJP) welds previously rejected by Phased Array Ultrasonic Testing (PAUT) technicians. ZPMC QC identified as Mr. Sun Wan Fei was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-FCAW-2G (2F)-repair-1.

This QA observed ZPMC qualified welding personnel identified as Mr. Xiang Huanfeng (059416) perform FCAW repair welding on U-rib to deck panel Partial Joint Penetration (PJP) welds previously rejected by Phased Array Ultrasonic Testing (PAUT) technicians. ZPMC QC identified as Mr. Sun Wan Fei was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-FCAW-2G (2F)-repair-1.

This QA observed ZPMC qualified welding personnel identified as Mr. Hu Yongcang (203805) perform FCAW repair welding on U-rib to deck panel Partial Joint Penetration (PJP) welds previously rejected by Phased Array Ultrasonic Testing (PAUT) technicians. ZPMC QC identified as Mr. Sun Wan Fei was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-FCAW-2G (2F)-repair-1.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.



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Summary of Conversations:

ABF QA inspector identified as Mr. Kelvin Cheung informed this QA that ZPMC will re-examine the welds affected by the flame straightening process on BP026-002 using the Ultrasonic Testing (UT) method.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Patrick Lowry (858)-344-2712, who represents the Office of Structural Materials for your project.

Inspected By:	Hall,Steven	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer
